RESPONSE

I. Status of the Claims

Claims 2-4 have been cancelled entirely without prejudice and without disclaimer. Claims 5-6 and 9 have been amended to more clearly claim the present invention. Claims 1 and 5-9 are therefore presently pending in the present case.

II. Support for the Amended Claims

Claim 5 has been amended to better claim the present invention. Amended Claim 5 finds support throughout the specification, claims and sequence listing as originally filed with particular support from previous Claim 5, original claims 1 and 3, the specification, at least at page 15, lines 1-8 and SEQ ID NO:1.

Claim 6 has been amended to better claim the present invention. Amended Claim 6 finds support throughout the specification, claims and sequence listing as originally filed with particular support from previous Claim 6, original Claim 4, the specification, at least at page 15, lines 1-8 and SEQ ID NO:3.

Claim 9 has been amended from a dependent to an independent claim in order to more clearly claim the present invention. Amended Claim 9 finds support throughout the specification, claims and sequence listing as originally filed with particular support from previous Claim 9, original Claim 4 and SEQ ID NO:3.

As all the amendments to the claims are fully supported by the specification, sequence listing and claims as originally filed, they do not constitute new matter. Entry is therefore respectfully requested.

III. New Objection

The Action raises a new objection alleging that the oath or declaration is defective, because Inventor Erin Hilbun did not sign the Oath/Declaration. However, Applicants respectfully submit that this is not correct. Inventors Carl Friddle and Erin Hilbun did both sign an Oath/Declaration, however, they each signed separate copies. These copies were then combined and submitted in response to a

Notice to File Missing parts, mailed on May 10, 2002 and received at the USPTO on May 14, 2002. These facts are evidenced by the documents provided herein as Exhibit A, photocopies of the respective Transmittal Form, postcard and the signed and submitted Declaration and Power of Attorney for Inventor Erin Hilbun. Thus, this objection has been addressed.

IV. Rejection of Claims Under 35 U.S.C. § 101 and § 112, First Paragraph

The Action has withdrawn the rejection of the claims under 35 U.S.C. § 101 and § 112, first paragraph, thus recognizing that the claimed invention is supported by a specific and substantial asserted utility or a well established utility.

V. Rejection of Claims Under 35 U.S.C. § 112, Second Paragraph

The Action maintains the rejection of claim 2 under 35 U.S.C. § 112, second paragraph, as being allegedly indefinite. While Applicants in no way agree and have successfully argued this issue before the Board, however, simply in order to more quickly advance the application to allowance, Claim 2 has been cancelled. Thus this issue has been rendered moot and the rejection has been avoided and should thus be withdrawn.

VI. Response to Rejection of Claim Under 35 U.S.C. § 102(e)

The Action next rejects Claims 1-9 under 35 U.S.C. § 102(e), as allegedly being potentially anticipated by a series of pending patent applications: Stefan, *et al.* (US application No. 2002/0119518), Lee, *et al.* (WO 02/46415) and Merkulov, *et al.* (WO 02/33086).

Applicants do not necessarily agree with the present rejections, particularly as it pertains to claims 1 and 9. Claim 1 reads on an isolated nucleic acid molecule comprising the nucleotide sequence of the ion exchanger of SEQ ID NO: 1. This sequence is not properly anticipated by the sequences in the cited applications as none are identical to that of SEQ ID NO: 1. Claim 9 also reads on a nucleic acid sequence that is not properly anticipated by the sequences in the cited applications as it also is not identical to sequences in those applications. However, as the claims have been amended to read on specific nucleic acid sequences which are not 100% identical to those in the cited applications of Stefan, et al. (US application No. 2002/0119518), Lee, et al. (WO 02/46415) and Merkulov, et al. (WO 02/33086), the pending rejection of the claims under 35 U.S.C. § 102(e) has been rendered moot and

withdrawal of the rejection is respectfully requested.

VII. **Conclusion**

The present document is a full and complete response to the Action. In conclusion, Applicants submit that, in light of the foregoing remarks, the present case is in condition for allowance, and such favorable action is respectfully requested. Should Examiner Nichols have any questions or comments, or believe that certain amendments of the claims might serve to improve their clarity, a telephone call to the undersigned Applicants' representative is earnestly solicited.

Respectfully submitted,

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Date

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